

cell in a sample [to a surface in the biosensor].

sub  
E1

2. (Twice amended) The biosensor according to claim 1, wherein the carbohydrate derivative is chemically bound or is bound via adsorption to a surface of a biosensor signal transducer [which constitutes one part of the biosensor signal transducer part].

D

3. (Twice amended) The biosensor according to claim 1, wherein the carbohydrate part of the carbohydrate derivative contains at least one component selected from the group consisting of hexosamine-, fucose-, galactose-, glucose-, mannose-, xylose-, N-acetylneuraminic acid residue and an analog thereof.

D<sup>2</sup>

8. (Amended three times) The biosensor according to claim 1, in which the carbohydrate derivative consists of a glycoprotein or a neoglycoprotein which is bound covalently or via adsorption to said surface [which consists of the signal transducing part of the biosensor].

9. (Twice amended) The biosensor according to claim 1, in which the biosensor is an optical biosensor which gives a signal change [at the] upon binding of a protein, a virus or a cell to [a] the carbohydrate derivative bound to the surface [in] of the biosensor.

12. (Twice amended) The biosensor according to claim 1, in which the carbohydrate derivative is an oligosaccharide or a derivative thereof which is bound via [an] the aglycon to [a] the surface of the biosensor.

13. (Twice amended) The biosensor according to claim 1, in which the carbohydrate derivative is an oligosaccharide or a derivative thereof which is bound via [an] the aglycon to said surface of the biosensor which is gold.

D<sup>3</sup>  
14. (amended) Method <sup>to bind</sup> to bind a carbohydrate or a derivative thereof to a gold surface, wherein [characterised in that] the surface first is coated with a thiol compound which [contain] contains an organic group which [can be] is used for chemical binding of a carbohydrate or derivative thereof.

Sub E2  
15. A gold [Gold] surface [modified] with a carbohydrate [or a] derivative [thereof] with an aglycon part wherein the carbohydrate derivative is covalently bound to the gold surface.

16. A method [Use] of using the biosensor according to claim 1 for determination of or analysis of a protein, a virus or a cell comprising the steps of:

exposing the biosensor to a sample containing a protein, virus or cell to be measured.

D<sup>3</sup>

measuring the amount or concentration of the protein,  
virus or cell in the sample, or  
detecting the protein, virus or cell in the sample.

Sub  
F2

Please add the following new claims:

--17. The biosensor of claim 1 wherein the carbohydrate derivative also comprises a spacer molecule part.

D<sup>4</sup>

18. The biosensor of claim 1 comprising a structure represented by;

carbohydrate-R-X-biosensor surface wherein;  
carbohydrate is a carbohydrate derivative,  
R is an alkyl or aromatic organic compound,  
X is a binding group linking R to a biosensor surface as defined in claim 1.

19. The biosensor of claim 1 comprising a structure represented by;

carbohydrate-R-X-protein-biosensor surface wherein;  
carbohydrate is a carbohydrate derivative,  
R is an alkyl or aromatic organic compound,  
X is a binding group linking R to a protein that is bound to a biosensor surface as defined in claim 1.